

**FDD
FILE
COPY****FOR OFFICIAL USE ONLY**
CLASSIFICATION ~~CONFIDENTIAL~~~~CONFIDENTIAL~~CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

STAT

CD NO.

COUNTRY USSR

DATE OF
INFORMATION 1950SUBJECT Scientific - Chemistry, composition of
gasolines

DATE DIST. 28 Mar 1951

HOW
PUBLISHED Bimonthly periodical

STAT

WHERE
PUBLISHED Moscow

NO. OF PAGES 1

DATE
PUBLISHED Feb 1950SUPPLEMENT TO
REPORT NO.

LANGUAGE Russian

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE
OF THE UNITED STATES WITHIN THE MEANING OF ESPIONAGE ACT 80
U. S. C. 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION
OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PRO-
HIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE

Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, No 1,
Jan/Feb 1950, p 117.NEW METHOD FOR DETERMINING COMPOSITION OF GASOLINES

At the 28-31 October 1949 meeting of the Department of Chemical Sciences, Academy of Sciences USSR, held together with the Academy of Sciences Georgian SSR at Tbilisi, Doctor of Chemical Sciences A. F. Plate presented a report on this subject on behalf of Academician B. A. Kazanskiy and his collaborators, Ye. A. Mikhaylova, A. P. Liberman, M. I. Batuyev, T. F. Bulanova, and G. A. Tarasova. Academicians V. M. Rodionov and M. M. Dubinin, Corresponding Members of Academy of Sciences USSR I. N. Nazarov and A. D. Petrov, Doctors of Sciences N. I. Shuykin, M. F. Nagiyev, and M. K. Akhmedli, and Candidates of Sciences S. P. Mekhtiyev, G. M. Mamedaliyev, and Kh. I. Areshidze participated in the subsequent discussion and pointed out the great significance of the work in question for the petroleum industry. A brief account of the contents, as given by the reporter, S. B. Shevelev, follows:

As a result of work extending over many years, a new combined method for determining the individual composition of gasolines has been developed. It permits determination, with a sufficient degree of accuracy, of the individual qualitative and quantitative composition of straight-run gasolines under use of generally available equipment produced by Soviet plants. The method is based on four processes: (1) fractionation by distillation; (2) chromatographic absorption analysis with the use of silica gel; (3) catalytic dehydrogenation of six-membered naphthene rings; and (4) optical analysis with the use of the spectrum of combination light dispersion. Application of the first three processes permits separation of the gasoline into simpler mixtures of hydrocarbons, which are then analyzed by optical method. The method has been brought to a stage at which it can be successfully applied by branch institutes. The new method of analyzing gasoline, which is based on achievements of Russian science, offers the possibility of carrying out a systematic investigation of the individual composition of USSR gasolines, thus continuing on a contemporary scientific level the classic work begun by Russian chemists. The knowledge of individual compositions will lead to more efficient methods of producing high-quality motor fuels, and crude materials for the chemical industry.

- E N D -

- 1 -

CLASSIFICATION ~~CONFIDENTIAL~~~~CONFIDENTIAL~~

STATE	☒ NAVY	☒ NSRB	DISTRIBUTION																	
ARMY	☒ AIR	☒ FBI	MBPC	☒																

FOR OFFICIAL USE ONLY